

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

b) Amendments to the Claims

--1. (Currently Amended) A method of ~~preparing porous~~ manufacturing material comprising the steps of:

(A) ~~making~~ contacting a solution containing a solvent, silicon and surfactant ~~be in contact~~ with a substrate for controlling alignment of an opposing surface of an overcoated layer thereon ~~having alignment control ability~~; and

(B) drying said coated substrate ~~made in contact with the solution~~ to remove the solvents contained in said solution and form a porous material having unaxially aligned channel structure in which the surfactant is held within the porous material.

2. (Original) A method according to claim 1, wherein silicon is contained in said solution in a state of compound.

3. (Cancelled)

4. (Currently Amended) A method of ~~preparing porous~~ manufacturing material, materials, comprising the steps of:

coating a substrate ~~having alignment control ability~~ capable of controlling alignment of an opposing surface of an overcoated layer thereon with a surfactant solution containing silicon alkoxide; and

drying said coated substrate to form a porous material with an unaxially aligned channel structure in which the surfactant is held within the porous material.

5. (Currently Amended) A method according to claim 4, wherein the step of coating the substrate is a step of selectively coating a desired portion of said

~~substrate with said solution in a desired pattern patterned mesostructured silica with uniaxially aligned channel structure is formed by a step of coating a desired position of a substrate having alignment control ability with a surfactant solution containing silicon alkoxide in a desired shape and a step of drying said substrate and, after the drying step, a patterned mesostructured silica is formed.~~

6. (Currently Amended) A method according to claim 4 or 5, wherein said substrate ~~with alignment control ability~~ is a silicon single crystal substrate having (110) orientation.

7. (Original) A method according to claim 4 or 5, wherein said substrate is a substrate whose surface is coated with a polymer compound film subjected to a rubbing process.

8. (Original) A method according to claim 4 or 5, wherein said substrate is a substrate whose surface is coated with a Langmuir-Blodgett film of polymer compound.

9. (Currently Amended) A method according to any one of claims 4 to 8 or 5, wherein the substrate is coated with the surfactant solution by a pen lithography method.

10. (Currently Amended) A method according to any one of claims 4 to 8 or 5, wherein the substrate is coated with the surfactant solution by an ink jet method.

11. (Currently Amended) A method according to any one of claims 4 to 8 or 5, wherein the substrate is coated with the surfactant solution by a dip coating method.

12. (Currently Amended) A method of ~~preparing porous~~ manufacturing material materials, comprising the steps of:

coating a substrate ~~having alignment control ability~~ capable of controlling alignment of an opposing surface of an overcoated layer thereon with a solution of surfactant containing silicon alkoxides;

drying said coated substrate to form a porous material having unaxially aligned channel structure in which the surfactant is held within the porous material; and, thereafter,

removing the surfactant.

13. (Currently Amended) A method according to claim 12, wherein said step of coating said substrate with said solution is a step of selectively coating a desired position portion of said substrate with said solution in a desired shape pattern.

14. (Currently Amended) A method according to claim 12 or 13, wherein said substrate ~~with alignment control ability~~ is a silicon single crystal substrate having (110) orientation.

15. (Original) A method according to claim 12 or 13, wherein said substrate is a substrate whose surface is coated with a polymer compound film subjected to a rubbing process.

16. (Original) A method according to any one of claims 12 or 13, wherein said substrate is a substrate whose surface is coated with a Langmuir-Blodgett film of polymer compound.

17. (Currently Amended) A method according to any one of claims 12 to ~~16~~ or 13, wherein said substrate is coated with said surfactant solution by a pen lithography method.

18. (Currently Amended) A method according to any one of claims 12 to ~~16~~ or 13, wherein said substrate is coated with said surfactant solution by an ink jet method.

19. (Currently Amended) A method according to any one of claims 12 to ~~16~~ or 13, wherein said substrate is coated with said surfactant solution by a dip coating method.

20. (Currently Amended) A method of ~~preparing porous~~ manufacturing material, ~~materials~~, comprising the steps of:

(A) attaching a solution containing a solvent, silicon and surfactant to a substrate ~~having alignment control ability~~ for controlling alignment of an opposing surface of an overcoated layer thereon; and

(B) drying said substrate to which said solution is attached to remove removing the solvents contained in said solution and form a porous material having unaxially aligned channel structure in which the surfactant is held within the porous material attached to said substrate.

21. (Original) A method according to claim 20, wherein silicon is contained in said solution in the form of compound.

22. (Original) A method according to claim 20, wherein silicon is contained in said solution as silicon alkoxides.

23. (New) A method of manufacturing material comprising the steps of:

(A) contacting a solution containing a solvent, silicon and surfactant with a substrate; and

(B) drying said substrate in contact with the solution to remove the solvent and form a porous material which has uniaxially aligned channel structure and pores in which the surfactant is held.

24. (New) A method according to Claim 1, further comprising the step of removing said surfactant.--